

**Piedmont/Mountain Semipermanent Impoundment** communities are wetlands formed on beaver ponds or on old, undisturbed, man-made impoundments. Vegetation occurs on saturated, organic soils between flooded areas. Trees are typically absent or standing dead, though the flood-tolerant red maple (*Acer rubrum*) may be present. Wetland shrubs such as tag alder (*Alnus serrulata*) and willows (*Salix* spp.) may form dense patches in some areas. Many areas are dominated by opportunistic wetland herbs such as jewelweed (*Impatiens* spp.), sedges (*Carex* spp.), bulrushes (*Scirpus* spp.), rushes (*Juncus* spp.), arrowleaf tearthumb (*Polygonum sagittatum*), monkey flower (*Mimulus* spp.), and others. The rare greenfruit bur-reed (*Sparganium chlorocarpum*), or other rare bog species, are potential in areas where Southern Appalachian Bogs occur in the vicinity. These communities also have potential for rare bird species of open wetlands. A poorly-understood relationship may exist between these communities and formation of some Southern Appalachian Bog communities.

**Pine-Oak/Heath** occurs on very dry, acidic soils of exposed ridgetops and crests at low to middle elevations. It has an open canopy typically dominated by pitch pine (*Pinus rigida*), Table Mountain pine (*Pinus pungens*), other pines and hardwoods of dry sites such as oaks (*Quercus* spp.), black gum (*Nyssa sylvatica*), persimmon (*Diospyros virginiana*), and sourwood (*Oxydendrum arboreum*). They have sparse understories, but well-developed shrub layers dominated by mountain laurel (*Kalmia latifolia*), often with many other heaths such as mountain fetterbush (*Leucothoe recurva*), blueberries (*Vaccinium* spp.), black huckleberry (*Gaylussacia baccata*), and others. Herbs are sparse beneath the dense cover, but include galax (*Galax urceolata*), teaberry (*Gaultheria procumbens*), common greenbrier (*Smilax rotundifolia*), trailing arbutus (*Epigaea repens*), eastern bracken (*Pteridium aquilinum*), and in some areas, the uncommon beargrass (*Xerophyllum asphodeloides*).

**Northern Hardwood Forest (Beech Gap Subtype)** is quite uncommon, occurring only at high elevations on exposed, windy gaps and slopes. It is dominated by a dense, stunted canopy of American beech (*Fagus americana*) which may be quite old in spite of their small stature. An understory is typically poorly-developed or absent. Herbs of high elevations may be present, such as Pennsylvania sedge (*Carex pensylvanica*), other sedges (*Carex* spp.), Canada mayflower (*Maianthemum canadense*), fancy fern (*Dryopteris intermedia*), hay-scented fern (*Dennstaedtia punctilobula*), whorled wood aster (*Aster acuminatus*), and trout lily (*Erythronium umbilicatum*).

**Northern Hardwood Forest (Typic Subtype)** is widespread at high elevations, usually on open slopes and crests. Yellow birch (*Betula alleghaniensis*) is often dominant, although sugar maple (*Acer saccharum*) is often dominant in areas on mafic rock types. Other hardwoods such as yellow buckeye (*Aesculus flava*), American beech (*Fagus americana*), white ash (*Fraxinus americana*), and red oak (*Quercus rubra*) are codominant. Their moderately dense understories may contain alternate-leaved dogwood (*Cornus alternifolia*), hop-hornbeam (*Ostrya virginiana*), striped maple (*Acer pensylvanicum*), and mountain maple (*Acer spicatum*). Shrubs are generally sparse, but may include rhododendron (*Rhododendron* spp.), witch-hobble (*Viburnum lantanoides*), mountain elderberry (*Sambucus pubens*), or gooseberries (*Ribes* spp.). A fairly well-developed herb layer, with many species of primarily northern distribution, is typical.